Bennington Landfill
Houghton Lane
Bennington, Vermont 05201

EPA ID#: VTD 981064223
Potential Hazardous Waste Site
Site Inspection
February 1987

Waste Management Division
Department of Water Resources
and Environmental Engineering
Vermont Agency of Environmental Conservation

Bennington Landfill
Site Inspection Report

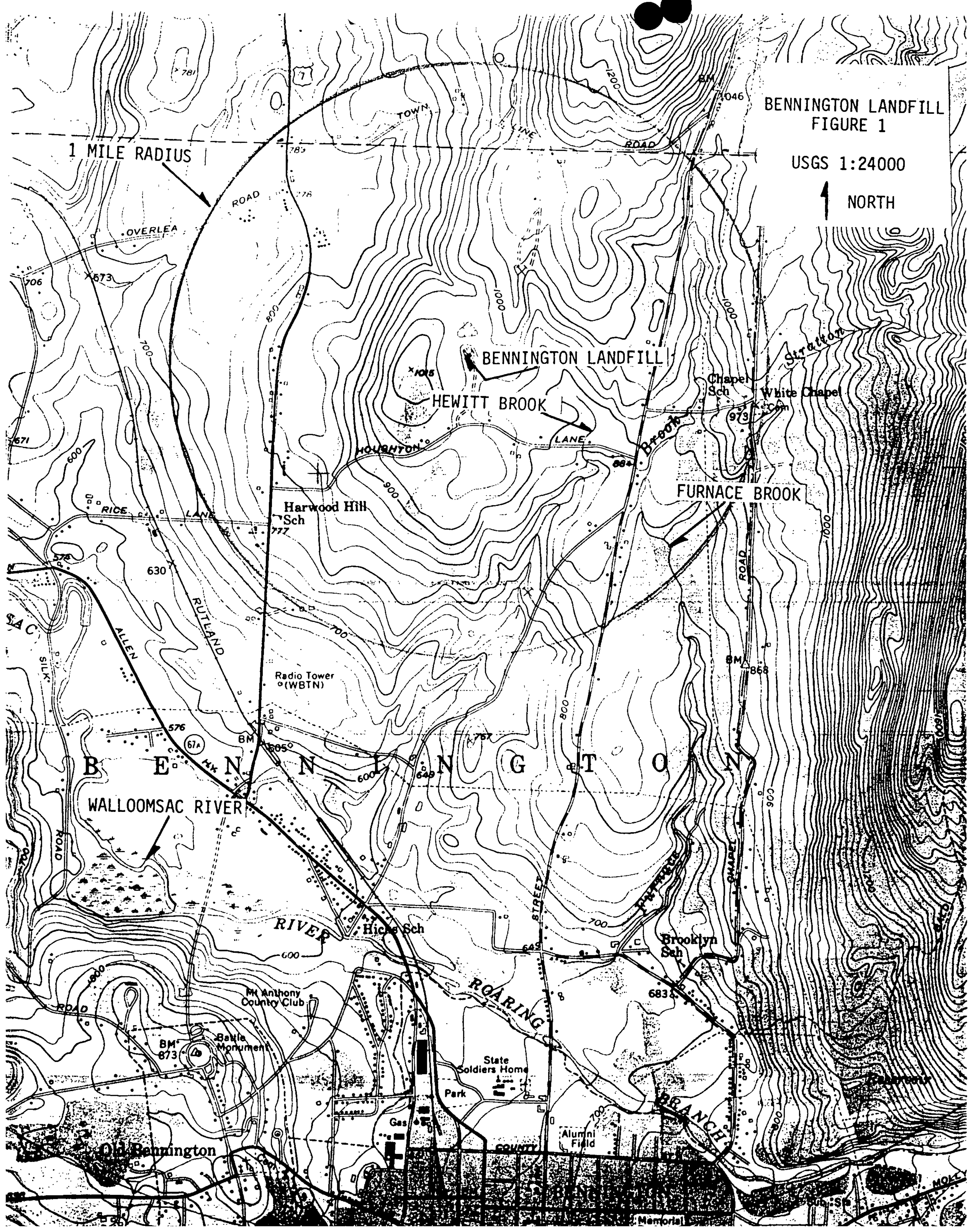
Introduction:

The Waste Management Division, Department of Water Resources and Environmental Engineering, Vermont Agency of Environmental Conservation (AEC) conducted a site inspection of the Bennington Landfill located in Bennington, Vermont on August 20-21, 1986. The Site Inspection (SI) was conducted in response to a Preliminary Assessment completed by the AEC in January 1986 which recommended a SI to be performed on this site. The SI was completed based on information gathered from reviews of state and local files, interviews with knowledgeable parties, and from the site visit and sampling effort.

The documents contained in this report comply with the requirements of EPA Superfund legislation (CERCLA). The objective of an SI is to provide a preliminary screening of sites to enable EPA to prioritize non-petroleum hazardous waste sites. A SI is a limited effort and is not intended to suggest a more detailed investigation.

Site Description:

The Bennington Landfill is a municipal sanitary landfill owned and operated by the town of Bennington for the disposal of


BENNINGTON LANDFILL
FIGURE 1
USGS 1:24000
NORTH
1 MILE RADIUS
BENNINGTON LANDFILL
HEWITT BROOK
FURNACE BROOK
WALLOOMSAC RIVER
TOWN LINE ROAD
OVERLEA ROAD
HOUGHTON LANE
RICE LANE
RUTLAND
ALLEN
SILK ROAD
Harwood Hill Sch
Radio Tower (WBTN)
Chapel Sch
White Chapel
Stratton
Brook
B E N N I N G T O N
RIVER
Hicks Sch
Brooklyn Sch
ROARING BRANCH
Mt Anthony Country Club
Battle Monument
State Soldiers Home
Park
Alumni Field
Old Bennington
STREET
CHAPEL ROAD
COUNTY
Memorial

municipal refuse. The site is a 28 acre parcel of land with 10 acres used as an active sanitary landfill. The remaining land is used as a stump dump where untreated wood and brush can be stored and eventually burned. The landfill is bounded to the north by a sand and gravel pit, a rural residential area and apple orchards to the west, a swampy area to the east and Houghton Lane, in which low density residential housing is developed, to the south.

Site History and Activity:

The Bennington Landfill began operation as a municipal sanitary landfill in June of 1969. From 1969 until 1985, the landfill was leased by the town of Bennington. The town purchased the landfill property in 1985. Prior to its use as a landfill, the area was an active sand and gravel pit. From 1969 until 1975, liquid industrial wastes were disposed of in an unlined lagoon. This lagoon was closed in 1975 and after attempts to dewater it failed, it was buried by the landfilled material.

Several industries located in Bennington, Vermont disposed of hazardous waste at the landfill from 1969 until 1978 (2,13). Jard company disposed of 60,000 scrap capacitors containing PCB's, as well as an unknown quantity of PCB oils between 1970 and 1975. Benmont Corporation, a wrapping paper manufacturer, disposed of waste inks, glues and solvents in the lagoon between

1969 and 1975. The BIJUR Company disposed of perchloroethylene from degreasing operations in the lagoon. Globe Union Battery Company, A Division of Johnson Controls disposed of paint thinner, solvents and scrap lead automotive batteries in the landfill between 1971 and 1978.

The first quantitive study of the leachate at the landfill was done by Environmental Associates, Burlington, Vermont for the Town of Bennington in August 1974 (4). A more complete evaluation by Environmental Associates was done in July 1975 (5). It was concluded that the landfill was affecting the quality of ground and surface water downgradient from the landfill.

The Solid Waste Section of the Waste Management Division of the Vermont Agency of Environmental Conservation (AEC) initiated a project in September 1974 that studied the leachate problem at the landfill (6). This project confirmed the conclusions by Environmental Associates that leachate from the Bennington Landfill has an adverse effect on both ground and surface water in and around the landfill.

The U.S. EPA National Enforcement Investigation Center analyzed samples of leachate and soil from the area of the industrial lagoon in the winter of 1976 and detected PCB's in both the solid and liquid phase of the lagoon (12). Further sampling

by the AEC in the spring of 1976 revealed several leachate seeps emanating from the toe of the landfill which contained PCB's.

Compliance monitoring by the AEC's Solid Waste Section detected volatile organic compounds and levels of metals above the health advisory levels set in the Safe Drinking Water Act.

Environmental Setting:

The Bennington Landfill is situated on a glacial kame terrace located in the eastern side of the Bennington Valley. The general geology of the area consists of kame gravels which are well bedded, variable in texture, ranging in size from boulders to sands. The kame gravels are underlain by a compact glacial till which slopes to the southeast. Bedrock in the area of the landfill has been mapped as Dunham Dolomite described as a thick bedded gray, buff sandy dolomite. Well yields for bedrock wells located within a 1/4 mile of the landfill show drillers yields of 5-10 gallons/min. (3,4,7,14). A 1966 study conducted by the Vermont Department of Water Resources identified the overburden in this area to have low to moderate groundwater potential, in which wells constructed in this material would yield sufficient quantities of water for domestic, commercial, and light industrial use. The known wells in the area of the landfill are completed in both the overburden and bedrock aquifers.

The groundwater flow direction in the overburden is considered to follow the kame gravel/till contact and thus flows southeast. Groundwater discharge occurs at a seepage zone lying at the swamp margin east of the site. It has been reported that the landfill was built on top of springs which discharge groundwater (4).

Two public water supplies lie within a three mile radius of the Bennington Landfill. Morgan Spring located in Bennington's Memorial Park, approximately 3 miles south of the landfill, is used in times of peak demands as an emergency supply for the town of Bennington. The spring is currently being studied as a potential source to augment the main water supply. The Chapel Pond Trailer Park located approximately 1 mile east of the landfill has a community water supply served by both a spring and well which provides service for 32 families.

There are 150 private drinking water supplies in both bedrock and shallow overburden within a three mile radius from the landfill (14). There are six public non-community systems, mostly restaurants, which use private wells as a backup supply to the municipal system.

Three surface water bodies flow within one mile of the Bennington Landfill: Furnace Brook, Stratton Brook, and Hewitt

Brook. Furnace Brook and Stratton Brook originate from the Green Mountain highland located a mile to the east from the landfill. Hewitt Brook originates in a wetland located 1/4 mile east of the landfill. Both Hewitt Brook and the Walloomsac are used for recreational fisheries. There are no known surface water intakes within three stream miles of the site. Surface runoff from the landfill area is diverted to the south by a trench located along the western border of the landfill. During the site inspection there was no flowing water in the diversion trench.

Technical Approach:

On Wednesday and Thursday, August 20 and 21, personnel from the AEC's Non-Petroleum Sites Group conducted a site inspection at and adjacent to the Bennington Landfill located in Bennington, Vermont. The activities related to this site inspection consisted of the collection of samples from residential drinking water supplies, surface water and sediment at and adjacent to the landfill. The results of this site inspection will be used to develop the MITRE Hazard Ranking System (HRS) score.

Groundwater samples from private wells, surface water samples and sediment samples were collected on August 20. Onsite groundwater and sediment samples were collected on August 21. A total of seven groundwater samples, 3 surface water samples and 4

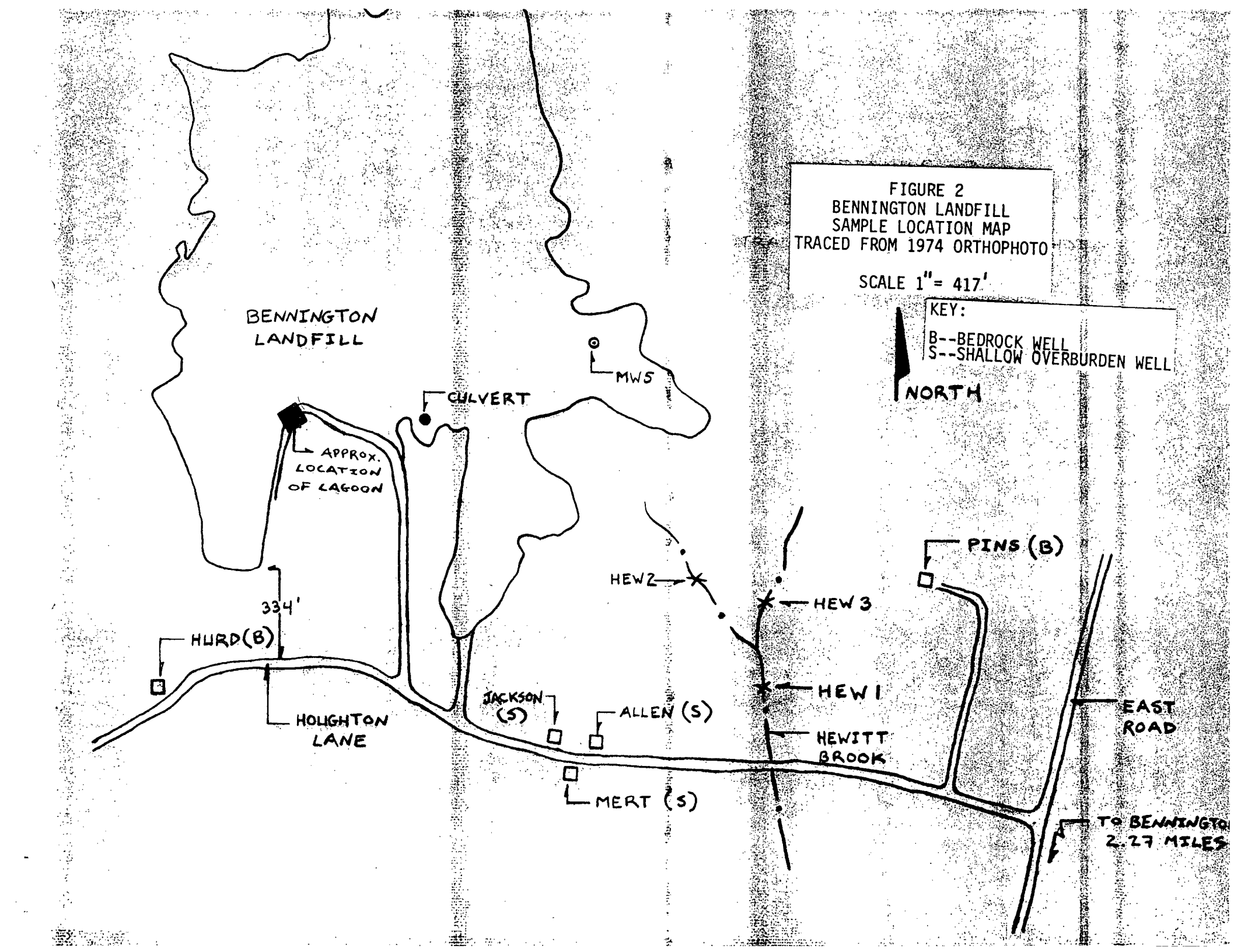


FIGURE 2
BENNINGTON LANDFILL
SAMPLE LOCATION MAP
TRACED FROM 1974 ORTHOPHOTO

SCALE 1" = 417'

TABLE 1
BENNINGTON LANDFILL
SUMMARY OF SAMPLE COLLECTION

SAMPLE LOCATION	DATE COLLECTED	MEDIUM	LAB/#	ANALYSES	DESCRIPTION/RATIONALE
HURD	8/20/86	GROUNDWATER GROUNDWATER GROUNDWATER	AEC 24539 AEC 24529 AQ 61852	VOLATILES METALS SEMIVOLATILES	DRINKING WATER WELL AT HURD RESIDENCE, HOUGHTON LANE INFERRED TO BE UP GRADIENT FROM SITE
PINS	8/20/86	GROUNDWATER GROUNDWATER	AEC 24542 AEC 24531	VOLATILES METALS	DRINKING WATER WELL AT PINSONEAULT RESIDENCE, AUTUMN ACRES DRIVE SUSPECTED TO BE DOWN GRADIENT FROM SITE
MERT	8/20/86	GROUNDWATER GROUNDWATER	AEC 24535 AEC 24530	VOLATILES METALS	DRINKING WATER WELL AT MERTRUDE RESIDENCE, HOUGHTON LANE SUSPECTED TO BE DOWN GRADIENT FROM SITE
JACKSON	8/20/86	GROUNDWATER GROUNDWATER GROUNDWATER	AEC 24545 AEC 24525 AQ 61854	VOLATILES METALS SEMIVOLATILES	WELL POINT ONCE USED AS WATER SUPPLY AT JACKSON RESIDENCE, HOUGHTON LANE SUSPECTED TO BE DOWN GRADIENT FROM SITE
ALLEN/A	8/21/86	GROUNDWATER	AEC 24543	VOLATILES	SHALLOW WELL ONCE USED AS A WATER SUPPLY AT ALLEN RESIDENC HOUGHTON LANE SUSPECTED TO BE DOWN GRADIENT FROM SITE

BENNINGTON LANDFILL
SUMMARY OF SAMPLE COLLECTION

SAMPLE LOCATION	DATE COLLECTED	MEDIUM	LAB/#	ANALYSES	DESCRIPTION/RATIONALE
ALLEN/B	8/21/86	GROUNDWATER	AEC 24544	VOLATILES	DUPLICATE OF ALLEN/A
ALLEN	8/21/86	GROUNDWATER	AEC 24528	METALS	SAME LOCATION AS ALLEN A & B
HEW 1	8/20/86	SURFACE WATER SURFACE WATER SEDIMENT	AEC 24532 AEC 24522 AQ 61856	VOLATILES METALS SEMIVOLATILES	DOWNSTREAM LOCATION ON HEWITT BROOK
HEW 1S	8/20/86	SEDIMENT	AEC 24518	METALS	SAME LOCATION AS HEW 1
HEW 2	8/20/86	SURFACE WATER SURFACE WATER SEDIMENT	AEC 24533 AEC 24523 AQ 61857	VOLATILES METALS SEMIVOLATILES	MIDSTREAM LOCATION ON HEWITT BROOK WESTERN TRIB
HEW 2S	8/20/86	SEDIMENT	AEC 24519	METALS	SAME LOCATION AS HEW 2
HEW 3	8/20/86	SURFACE WATER SURFACE WATER SEDIMENT	AEC 24534 AEC 24524 AQ 61858	VOLATILES METALS SEMIVOLATILES	UPSTREAM LOCATION ON HEWITT BROOK EASTERN TRIB

BENNINGTON LANDFILL
SUMMARY OF SAMPLE COLLECTION

SAMPLE LOCATION	DATE COLLECTED	MEDIUM	LAB/#	ANALYSES	DESCRIPTION/RATIONALE
HEW 3S	8/20/86	SEDIMENT	AEC 24520	METALS	SAME LOCATION AS HEW 3
MW 5	8/21/86	GROUNDWATER GROUNDWATER GROUNDWATER	AEC 24536 AEC 24526 AQ 61851	VOLATILES METALS (SEMIVOLATILES PESTICIDES & PCBs)	BACKGROUND MONITORING WELL LOCATED ON SITE
CULVERT/A	8/21/86	GROUNDWATER	AEC 24540	VOLATILES	SAMPLE OBTAINED FROM UNDERDRAIN LOCATED ON SITE
CULVERT/B	8/21/86	GROUNDWATER	AEC 24541	VOLATILES	DUPLICATE OF CULVERT/A
CULVERT	8/21/86	GROUNDWATER GROUNDWATER SEDIMENT	AEC 24527 AQ 61853 AQ 61855	METALS (PESTICIDES & PCB SEMIVOLATILES) SEMIVOLATILES	SAME LOCATION AS CULVERT A&B
CULVERT/S	8/21/86	SEDIMENT	AEC 24521	METALS	SAME LOCATION AS CULVERT A&B
FIELD BLANK	8/21/86	RINSE WATER	AEC 24537	VOLATILES	FIELD BLANK FILLED WITH DISTILLED WATER AFTER FIELD WASH OF BAILER

BENNINGTON LANDFILL
SUMMARY OF SAMPLE COLLECTION

SAMPLE LOCATION	DATE COLLECTED	MEDIUM	LAB/#	ANALYSES	DESCRIPTION/RATIONALE
TRIP BLANK	8/19/86	DISTILLED WATER	AEC 24538	VOLATILES	TRIP BLANK FILLED WITH DISTILLED WATER OBTAINED FROM AEC LAB

Note: AEC - VT Agency of Environmental Conservation Lab.
AQ - Aquatec Lab.

sediment samples were collected for this site inspection. Table 1 shows the type of sample taken, the analyses performed and the rationale for taking the sample. Tapwater samples were collected from the Hurd residence (Hurd), the Pinsoneault residence (Pins), and the Mertrude residence (Mert). Samples were obtained from faucets that did not contain a filter or screen and prior to a holding tank. Water was run for 15 minutes to purge the system of stagnant water.

Abandoned wells at the Allen residence (Allen/A, Allen/B, Allen) and Jackson residence (Jackson) were utilized as groundwater sampling ports. The Jackson well was purged three well volumes before sampling. The Allen well was purged until the well was de-watered. The well was allowed to fully recover before sampling occurred.

Surface water samples (HEW 1, HEW 2, HEW 3) and sediment samples (HEW 1S, HEW 2S, HEW 3S) were collected from Hewitt Brook. All surface water samples were taken just under the water surface by standing downstream and collecting the sample from upstream. Sampling proceeded from the downstream sample to the midstream western trib to the upstream eastern trib. This sampling strategy provides the least amount of sediment disturbance.

Onsite background groundwater samples were obtained from a upgradient monitoring well (MW5) located near the northeastern boundary of the landfill. This well was purged three well volumes prior to sampling.

Onsite groundwater samples (culvert A, culvert B, culvert) were collected from an underdrain outlet which empties into a ponded area east of the landfill. The underdrain was designed to lower the water table under the landfill.

Sediment samples (culvert, culvert/s) were taken from an area influenced by the outflow from the underdrain.

All samples were collected in accordance with the reviewed and approved sampling plan. Sample collection and preservation were performed in accordance with methods outlined in the AEC Field Methods Manual. After collection samples were stored on ice until they were delivered to a contract laboratory or the AEC lab. All sampling activity was photodocumented and chain of custody was maintained for all samples collected.

Results:

The following tables presents the analytical results from samples collected at the Bennington Landfill:

* TABLE 2 GROUND AND SURFACE WATER VOLATILE RESULTS

* TABLE 3 GROUND AND SURFACE WATER METAL RESULTS

* TABLE 4 SEDIMENT METAL RESULTS

* TABLE 5 GROUNDWATER BASE/NEUTRAL EXTRACTABLE SEMIVOLATILE RESULTS

* TABLE 6 SEDIMENT BASE/NEUTRAL EXTRACTABLE SEMIVOLATILE RESULTS

* TABLE 7 GROUNDWATER ACID EXTRACTABLE SEMIVOLATILE RESULTS

* TABLE 8 SEDIMENT ACID EXTRACTABLE SEMIVOLATILE RESULTS

* TABLE 9 GROUNDWATER PESTICIDE AND PCB RESULTS

All results are quantitative results with the exception of the culvert sediment sample labeled AQ 61855, culvert groundwater sample labeled AW 61853, HEW 1 sediment sample labeled AQ 61856, HEW 2 sediment sample labeled AQ 61857 and HEW 3 sediment sample labeled AQ 61858 which in addition to quantitive results had a peak identification scan which estimated concentrations of compounds not found on the hazardous substance list. Culvert sediment sampled labeled AQ 61855 showed a series of chromatographic peaks identified as PCB's showing an estimated concentration of 290,000 ug/kg.

Groundwater Route:

Benzene, ethylbenzene, toluene, xylene, naphtalene, di-n-butyl phthalate, diethyl phthalate 2-methlnaphthalene, p-chloro-m-cresol, 4-methylphenol, and PCB's were detected in samples collected from the out flow of the underdrain labeled culvert/A, culvert/B, culvert. Concentrations of nickel, lead and arsenic found in the culvert were greater than 10X that of background. Sediment samples taken at the culvert location showed elevated concentrations of nickel, leak and zinc. No semi-volatile compounds were detected in the culvert sediment sample which could be due to elevated detection limits resulting from dilution. This sample had to be diluted due to high levels of PCB's which were estimated to be 290,000 ug/kg.

The outflow from the underdrain empties to a unlined ponded area which is not fenced in and could infiltrate to the shallow aquifer.

Surface Water Route:

No volatile organic compounds were detected at the three surface water sampling locations. Bis(2-ethylhexyl) phthalate was detected in sediment at HEW 3S but at a concentration not reliably quantifiable. Metals quantified from surface water and sediment were not significantly elevated to be attributable to the landfill.

TABLE 2
BENNINGTON LANDFILL
GROUND & SURFACE WATER
VOLATILE ORGANIC RESULTS
(ppb)

SAMPLE LOCATION:		U JACKSON	ALLEN/A	ALLEN/B	PINS	HURD	MERT	MW5	TU CULVERT/A	T CULVERT/B	HEW 1	U HEW 2	HEW 3
SAMPLE NUMBER:		AEC 24545	AEC 24543	AEC 24544	AEC 24542	AEC 24539	AEC 24535	AEC 24536	AEC 24540	AEC 24541	AEC 24532	AEC 24533	AEC 24534
VOLATILE ORGANIC COMPOUND	AEC LAB DETECTION LIMITS (ppb)												
BROMODICHLOROMETHANE	6.0	-	-	-	-	-	-	-	-	-	-	-	-
BROMOFORM	7.0	-	-	-	-	-	-	-	-	-	-	-	-
BROMOMETHANE	ND	-	-	-	-	-	-	-	-	-	-	-	-
CARBON TETRACHLORIDE	2.0	-	-	-	-	-	-	-	-	-	-	-	-
N - BUTYLBENZENE	ND	-	-	-	-	-	-	-	-	-	-	-	-
CHLOROETHANE	ND	-	-	-	-	-	-	-	-	-	-	-	-
2 - CHLOROETHYLVINYL ETHER	4.4	-	-	-	-	-	-	-	-	-	-	-	-
CHLOROFORM	6.0	-	-	-	-	-	-	-	-	-	-	-	-
CHLOROMETHANE	ND	-	-	-	-	-	-	-	-	-	-	-	-
DIBROMOCHLOROMETHANE	ND	-	-	-	-	-	-	-	-	-	-	-	-
P - XYLENE	6.2	-	-	-	-	-	-	-	-	-	-	-	-
M - XYLENE	5.8	-	-	-	-	-	-	-	-	-	-	-	-
O - XYLENE	ND	-	-	-	-	-	-	-	-	-	-	-	-
DICHLORODIFLUOROMETHANE	ND	-	-	-	-	-	-	-	-	-	-	-	-
1,1 - DICHLOROETHANE	5.8	-	-	-	-	-	-	-	-	-	-	-	-
1,2 - DICHLOROETHANE	0.7	-	-	-	-	-	-	-	-	-	-	-	-
1,1 - DICHLOROETHENE	0.9	-	-	-	-	-	-	-	-	-	-	-	-
TRANS - 1,2 - DICHLOROETHENE	0.7	-	-	-	-	-	-	-	-	-	-	-	-
1,2 - DICHLOROPROPANE	0.9	-	-	-	-	-	-	-	-	-	-	-	-
CIS - 1,3 - DICHLOROPORPENE	1.9	-	-	-	-	-	-	-	-	-	-	-	-
TRANS - 1,3 - DICHLOROPROPENE	2.8	-	-	-	-	-	-	-	-	-	-	-	-
METHYLENE CHLORIDE	0.8	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2,2 - TETRACHLOROETHANE	4.6	-	-	-	-	-	-	-	-	-	-	-	-
TETRACHLOROETHENE	10.8	-	-	-	-	-	-	-	-	-	-	-	-
1,1,1 - TRICHLOROETHANE	7.0	-	-	-	-	-	-	-	-	-	-	-	-
1,1,2 - TRICHLOROETHANE	3.6	-	-	-	-	-	-	-	-	-	-	-	-
TRICHLOROETHENE	0.8	-	-	-	-	-	-	-	-	-	-	-	-
TRICHLOROFLUOROMETHANE	ND	-	-	-	-	-	-	-	-	-	-	-	-
VINYL CHLORIDE	ND	-	-	-	-	-	-	-	-	-	-	-	-
BENZENE	5.4	-	-	-	-	-	-	-	45	53	-	-	-
CHLOROBENZENE	4.9	-	-	-	-	-	-	-	-	-	-	-	-
1,2 - DICHLOROBENZENE	5.9	-	-	-	-	-	-	-	-	-	-	-	-
1.3 - DICHLOROBENZENE	7.7	-	-	-	-	-	-	-	-	-	-	-	-
1,4 - DICHLOROBENZENE	5.7	-	-	-	-	-	-	-	-	-	-	-	-
ETHYLBENZENE	5.8	-	-	-	-	-	-	-	82	86	-	-	-
TOLUENE	5.0	-	-	-	-	-	-	-	1010	1010	-	-	-
STYRENE	ND	-	-	-	-	-	-	-	-	-	-	-	-
N - PROPYLBENZENE	ND	-	-	-	-	-	-	-	-	-	-	-	-
O - CHLOROTOLUENE	ND	-	-	-	-	-	-	-	-	-	-	-	-
TRIMETHYL BENZENE	ND	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL XYLENES	ND	-	-	-	-	-	-	-	249	261	-	-	-

NOTE: ND = NOT DETERMINED
- = NOT DETECTED

U = UNIDENTIFIED PEAKS FOUND IN 601 TEST

T = UNIDENTIFIED PEAKS FOUND IN 602 TEST

TABLE 3

BENNINGTON LANDFILL
GROUND & SURFACE WATER
METAL RESULTS
(ppb)

SAMPLE LOCATION:	JACKSON	ALLEN	PINS	HURD	MERT
SAMPLE NUMBER:	AEC 24525	AEC 24528	AEC 24531	AEC 24529	AEC 24530
METAL					
ANTIMONY	<1.0	<1.0	<1.0	<1.0	<1.0
BERYLLIUM	<1.0	<1.0	<1.0	<1.0	<1.0
COPPER	7.0	5.0	6.0	27.0	17.0
NICKEL	14.0	7.0	4.0	9.0	4.0
MERCURY	<0.2	<0.2	<0.2	0.2	<0.2
LEAD	5.0	2.0	2.0	2.0	<2.0
SILVER	<1.0	<1.0	<1.0	<1.0	<1.0
THALLIUM	<1.0	<1.0	<1.0	<1.0	<1.0
SELENIUM	<3.0	<3.0	<3.0	<3.0	<3.0
ZINC	35.0	8.0	4.0	30.0	16.0
ARSENIC	<3.0	<3.0	<3.0	<3.0	<3.0
CHROMIUM	<1.0	<1.0	<1.0	<1.0	<1.0
CADMIUM	<0.0	<1.0	<1.0	<1.0	<1.0

SAMPLE LOCATION:	MW5	CULVERT	HEW1	HEW2	HEW3
SAMPLE NUMBER:	AEC 24526	AEC 24527	AEC 24522	AEC 24523	AEC 24524
METAL					
ANTIMONY	<1.0	<1.0	<1.0	<1.0	<1.0
BERYLLIUM	<1.0	<1.0	<1.0	<1.0	<1.0
COPPER	7.0	6.0	6.0	3.0	6.0
NICKEL	10.0	151.0	17.0	18.0	19.0
MERCURY	<0.2	<0.2	<0.2	0.4	<0.2
LEAD	2.0	28.0	5.0	5.0	5.0
SILVER	<1.0	<1.0	<1.0	<1.0	<1.0
THALLIUM	<1.0	<1.0	<1.0	<1.0	<1.0
SELENIUM	<3.0	<3.0	<3.0	<3.0	<3.0
ZINC	7.0	9.0	14.0	5.0	4.0
ARSENIC	<3.0	20.0	<3.0	<3.0	<3.0
CHROMIUM	<1.0	3.0	<1.0	<1.0	<1.0
CADMIUM	<0.0	2.0	<1.0	<0.0	<0.0

TABLE 4
BENNINGTON LANDFILL
SEDIMENT
METAL RESULTS
(ppm)

SAMPLE LOCATION:	HEW1S	HEW2S	HEW3S	CULVERT/S
SAMPLE NUMBER:	AEC 24518	AEC 24519	AEC 24520	AEC 24521
METAL				
ANTIMONY	<0.1	<0.1	<0.1	< 0.1
BERYLLIUM	<0.1	<0.1	0.1	0.1
COPPER	2.3	2.4	6.6	12.0
NICKEL	4.1	3.1	8.5	31.8
MERCURY	0.01	0.02	0.03	0.10
LEAD	2.8	5.9	8.2	25.4
SILVER	<0.1	<0.1	< 0.1	< 0.1
THALLIUM	0.0 I	0.0 I	0.0 I	<0.2
SELENIUM	< 0.5	< 0.5	<0.5	0.0 I
ZINC	11.3	9.8	16.4	210.0
ARSENIC	1.8	8.3	9.8	12.0
CHROMIUM	1.7	0.7	4.0	4.5
CADMIUM	0.1	0.1	0.3	0.5
% SOLID	59.52	12.92	43.72	81.45

CODE: I - INTERFERANCE DUE TO CHEMICALS OR COLOR

TABLE 5
BENNINGTON LANDFILL
GROUNDWATER
BASE/NEUTRAL EXTRACTABLE
SEMIVOLATILE ORGANIC RESULTS
(ppb)

SAMPLE LOCATION	HURD	JACKSON	MW5	CULVERT A
SAMPLE NUMBER	AQ 61852	AQ 61854	AQ 61851	AQ 61853
SEMIVOLATILE ORGANIC COMPOUND				
ACENAPHTHENE	10U	10U	10U	10U
1,2,4 - TRICHLOROBENZENE	10U	10U	10U	10U
HEXACHLOROBENZENE	10U	10U	10U	10U
HEXACHLOROETHANE	10U	10U	10U	10U
BIS (2 - CHLOROETHLY)ETHER	10U	10U	10U	10U
2 - CHLORONAPHTHALENE	10U	10U	10U	10U
1,2 - DICHLOROBENZENE	10U	10U	10U	10U
1,3 - DICHLOROBENZENE	10U	10U	10U	10U
1,4 - DICHLOROBENZENE	10U	10U	10U	10U
3,3 - DICHLOROBENZIDINE	20U	20U	20U	20U
2,4 - DINITROTOLUENE	10U	10U	10U	10U
FLUORANTHENE	10U	10U	10U	10U
4 - CHLOROPHENYL PHENYL ETHER	10U	10U	10U	10U
4 - BROMOPHENYL PHENYL ETHER	10U	10U	10U	10U
BIS (2 - CHLOROISOPROPYL) ETHER	10U	10U	10U	10U
BIS (2 - CHLOROETHOXY) METHANE	10U	10U	10U	10U
HEXACHLOROBUTADIENE	10U	10U	10U	10U
HEXACHLOROCYCLOPENTADIENE	10U	10U	10U	10U
ISOPHORONE	10U	10U	10U	10U
NAPHTHALENE	10U	10U	10U	34
NITROBENZENE	10U	10U	10U	10U
N - NITROSODIPHENYLAMIE	10U	10U	10U	10U
N - NITROSODIPROPYLAMIE	10U	10U	10U	10U
BIS (2 - ETHYLHEXYL) PHTHALATE	10U	10U	10U	NDB
BENZYL BUTYL PHTHALATE	10U	10U	10U	10U
DI - N - BUTYL PHTHALATE	10U	10U	10U	17
DI - N - OCTYL PHTHALATE	10U	10U	10U	10U
DIETHYL PHTHALATE	10U	10U	10U	34
DIMETHYL PHTHALATE	10U	10U	10U	10U
BENZO (A) ANTHRACENE	10U	10U	10U	10U
BENZO (A) PYRENE	10U	10U	10U	10U
BENZO (B) FLUORANTHENE	10U	10U	10U	10U
BENZO (K) FLUORANTHENE	10U	10U	10U	10U
CHRYSENE	10U	10U	10U	10U
ACENAPHTHYLENE	10U	10U	10U	10U
ANTHRACENE	10U	10U	10U	10U
BENZO (GHI) PERYLENE	10U	10U	10U	10U
FLUORENE	10U	10U	10U	10U
PHENANTHRENE	10U	10U	10U	10U
DIBENZO (AH) ANTHRACENE	10U	10U	10U	10U
INDENO (1,2,3 - CD) PYRENE	10U	10U	10U	10U

Table 5

SAMPLE LOCATION SAMPLE NUMBER	HURD AQ 61852	JACKSON AQ 61854	MW5 AQ 61851	CULVERT A AQ 61853
PYRENE	10U	10U	10U	10U
BENZYL ALCOHOL	10U	10U	10U	10U
4 - CHLOROANILINE	10U	10U	10U	10U
DIBENZOFURAN	10U	10U	10U	10U
2 - METHYLNAPHTHALENE	10U	10U	10U	10K
2 - NITROANILINE	50U	50U	50U	50U
3 - NITROANILINE	50U	50U	50U	50U
4 - NITROANILINE	50U	50U	50U	50U

KEY:

U - THE COMPOUND WAS ANALYZED FOR BUT NOT DECTECTED. THE NUMBER IS THE DETECTION LIMIT FOR THE COMPOUND.

NDB - QUANTITATION IS NOT POSSIBLE DUE TO THE RELATIVE CONCENTRATION OF THE COMPOUND IN THE BLANK.

K - THE COMPOUND WAS ANALYZED FOR AND DETECTED, BUT AT A CONCENTRATION NOT RELIABLY QUANTIFIABLE. THE NUMBER IS THE DETECTION LIMIT FOR THE COMPOUND.

C - THE RESULT HAS BEEN CORRECTED FOR THE PRESENCE OF THE COMPOUND IN THE BLANK.

A- PEAKS OF COMPOUNDS NOT ON HAZARDOUS SUBSTANCES LIST ANALYZED

TABLE 6
BENNINGTON LANDFILL
SEDIMENT
BASE/NEUTRAL EXTRACTABLE
SEMIVOLATILE ORGANIC RESULTS
(ppb)

SAMPLE LOCATION	HEW 1 [A]	HEW 2 [A]	HEW 3 [A]	CULVERT
SAMPLE NUMBER	AQ 61856	AQ 61857	AQ 61858	AQ 61855
SEMIVOLATILE ORGANIC COMPOUND				
ACENAPHTHENE	330U	330U	330U	10000U
1,2,4-TRICHLOROBENZENE	330U	330U	330U	10000U
HEXACHLOROBENZENE	330U	330U	330U	10000U
HEXACHLOROETHANE	330U	330U	330U	10000U
BIS (2-CHLOROETHLY) ETHER	330U	330U	330U	10000U
2-CHLORONAPHTHALENE	330U	330U	330U	10000U
1,2-DICHLOROBENZENE	330U	330U	330U	10000U
1,3-DICHLOROBENZENE	NDB	330U	330U	10000U
1,4-DICHLOROBENZENE	330U	330U	330U	10000U
3,3'-DICHLOROBENZIDINE	660U	660U	660U	20000U
2,4-DINITROTOLUENE	330U	330U	330U	10000U
FLUORANTHENE	330U	330U	330U	10000U
4-CHLOROPHENYL PHENYL ETHER	330U	330U	330U	10000U
4-BROMOPHENYL PHENYL ETHER	330U	330U	330U	10000U
BIS (2-CHLOROETHOXY) METHANE	330U	330U	330U	10000U
BIS (2-CHLOROISOPROPYL) ETHER	330U	330U	330U	10000U
HEXACHLOROBUTADIENE	330U	330U	330U	10000U
HEXACHLOROCYCLOPENTADIENE	330U	330U	330U	10000U
ISOPHORONE	330U	330U	330U	10000U
NAPHTHALENE	330U	330U	330U	10000U
NITROBENZENE	330U	330U	330U	10000U
N-NITROSIDIPHENYLAMIE	330U	330U	330U	10000U
N-NITROSODIPROPYLAMIE	330U	330U	330U	10000U
BIS (2-ETHYLHEXYL) PHTHALATE	330U	330U	330K	10000U
BENZYL BUTYL PHTHALATE	330U	330U	330U	10000U
DI-N-BUTYL PHTHALATE	330U	330U	330U	10000U
DI-N-OCTYL PHTHALATE	330U	330U	330U	10000U
DIETHYL PHTHALATE	330U	330U	330U	10000U
DIMETHYL PHTHALATE	330U	330U	330U	10000U
BENZO (A) ANTHRACENE	330U	330U	330U	10000U
BENZO (A) PYRENE	330U	330U	330U	10000U
BENZO (B) FLUORANTHENE	330U	330U	330U	10000U
BENZO (K) FLUORANTHENE	330U	330U	330U	10000U
CHRYSENE	330U	330U	330U	10000U
ACENAPHTHYLENE	330U	330U	330U	10000U
ANTHRACENE	330U	330U	330U	10000U
BENZO (GHI) PERYLENE	330U	330U	330U	10000U
FLUORENE	330U	330U	330U	10000U

TABLE 6
SEDIMENT
BASE/NEUTRAL EXTRACTABLE
SEMIVOLATILE ORGANIC RESULTS
(ppb)

SAMPLE LOCATION SAMPLE NUMBER	HEW 1 [A] AQ 61856	HEW 2 [A] AQ 61857	HEW 3 [A] AQ 61858	CULVERT AQ 61855
PHENANTHRENE	330U	330U	330U	10000U
DIBENZP(AH)ANTHRACENE	330U	330U	330U	10000U
INDENO (1,2,3-CD) PYRENE	330U	330U	330U	10000U
PYRENE	330U	330U	330U	10000U
BENZYL ALCOHOL	330U	330U	330U	10000U
4-CHLOROANILINE	330U	330U	330U	10000U
DIBENZOFURAN	330U	330U	330U	10000U
2-METHYLNAPHTHALENE	330U	330U	330U	10000U
2-NITROANILINE	1600U	1600U	1600U	50000U
3-NITROANILINE	1600U	1600U	1600U	50000U
4-NITROANILINE	1600U	1600U	1600U	50000U

KEY:

U - THE COMPOUND WAS ANALYZED FOR BUT NOT DETECTED.
THE NUMBER IS THE DETECTION LIMIT FOR THE COMPOUND.

NDB- QUANTITATION IS NOT POSSIBLE DUE TO THE RELATIVE CONCENTRATION OF THE COMPOUND IN THE BLANK.

K - THE COMPOUND WAS ANALYZED FOR AND DETECTED, BUT AT A CONCENTRATION NOT RELIABLY QUANTIFIABLE. THE NUMBER IS THE DETECTION LIMIT FOR THE COMPOUND.

C - THE RESULT HAS BEEN CORRECTED FOR THE PRESENCE OF THE COMPOUND IN THE BLANK.

NOTE: CULVERT SAMPLE: AQ 61855

TWENTY-FIVE CHROMATOGRAPHIC PEAKS, BETWEEN 1709 AND 2185, WERE IDENTIFIED AS CHLORINATED BIPHENYLS. TOTAL ESTIMATED CONCENTRATION OF PCB'S ATTRIBUTABLE TO THESE PEAKS IS 290,000 ug/kg WET.

A - PEAKS OF COMPOUNDS NOT ON HAZARDOUS SUBSTANCES LIST ANALYZED

TABLE 7
BENNINGTON LANDFILL
GROUNDWATER
ACID EXTRACTABLE
SEMIVOLATILE ORGANIC RESULTS
(ppb)

SAMPLE LOCATION	JACKSON	HURD	MW5	CULVERT
SAMPLE NUMBER	AQ 61854	AQ 61852	AQ 68151	AQ 61853
SEMIVOLATILE ORGANIC COMPOUND				
2,4,6 - TRICHLOROPHENOL	10U	10U	10U	10U
P - CHLORO - M - CRESOL	10U	10U	10U	34
2 - CHLOROPHENOL	10U	10U	10U	10U
2,4 - DICHLOROPHENOL	10U	10U	10U	10U
2,4 - DIMETHYLPHENOL	10U	10U	10U	10U
2 - NITROPHENOL	10U	10U	10U	10U
4 - NITROPHENOL	50U	50U	50U	50U
2,4 - DINITROPHENOL	50U	50U	50U	50U
4,6 - DINITRO - 2 - METHYLPHENOL	50U	50U	50U	50U
PENTACHLOROPHENOL	50U	50U	50U	50U
PHENOL	10U	10U	10U	10U
BENZOIC ACID	50U	50U	50U	50U
2 - METHYLPHENOL	10U	10U	10U	10U
4 - METHYLPHENOL	10U	10U	10U	47
2,4,5 - TRICHLOROPHENOL	50U	50U	50U	50U

KEY:

U - THE COMPOUND WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE DETECTION LIMIT FOR THE COMPOUND.

NDB - QUANTITATION IS NOT POSSIBLE DUE TO THE RELATIVE CONCENTRATION OF THE COMPOUND IN THE BLANK.

K - THE COMPOUND WAS ANALYZED FOR AND DETECTED, BUT AT A CONCENTRATION NOT RELIABLY QUANTIFIABLE. THE NUMBER IS THE DETECTION LIMIT FOR THE COMPOUND.

C - THE RESULT HAS BEEN CORRECTED FOR THE PRESENCE OF THE COMPOUND IN THE BLANK.

TABLE 8
BENNINGTON LANDFILL
SEDIMENT
ACID EXTRACTABLE
SEMIVOLATILE ORGANIC RESULTS
(ppb)

SAMPLE LOCATION	HEW 1	HEW 2	HEW 3	CULVERT
SAMPLE NUMBER	AQ 61856	AQ 61857	AQ 61858	AQ 61855
SEMIVOLATILE ORGANIC COMPOUND				
2,4,6 - TRICHLOROPHENOL	330U	330U	330U	10000U
P - CHLORO - M - CRESOL	330U	330U	330U	10000U
2 - CHLOROPHENOL	330U	330U	330U	10000U
2,4 - DICHLOROPHENOL	330U	330U	330U	10000U
2,4 - DIMETHYLPHENOL	330U	330U	330U	10000U
2 - NITROPHENOL	330U	330U	330U	10000U
4 - NITROPHENOL	1600U	1600U	1600U	50000U
2,4 - DINITROPHENOL	1600U	1600U	1600U	50000U
4,6 - DINITRO - 2 - METHLYPHENOL	1600U	1600U	1600U	50000U
PENTACHLOROPHENOL	1600U	1600U	1600U	50000U
PHENOL	330U	330U	330U	10000U
BENZOIC ACID	1600U	1600U	1600U	50000U
2 - METHYLPHENOL	330U	330U	330U	10000U
4 - METHYLPHENOL	330U	330U	330U	10000U
2,4,5 - TRICHLOROPHENOL	1600U	1600U	1600U	50000U
% SOLID	53.16	11.01	37.58	75.39

KEY:

U - THE COMPOUND WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE DETECTION LIMIT FOR THE COMPOUND.

NDB - QUANTITATION IS NOT POSSIBLE DUE TO THE RELATIVE CONCENTRATION OF THE COMPOUND IN THE BLANK.

K - THE COMPOUND WAS ANALYZED FOR AND DETECTED, BUT AT A CONCENTRATION NOT RELIABLY QUANTIFIABLE. THE NUMBER IS THE DETECTION LIMIT FOR THE COMPOUND.

C - THE RESULT HAS BEEN CORRECTED FOR THE PRESENCE OF THE COMPOUND IN THE BLANK.

TABLE 9
BENNINGTON LANDFILL
GROUNDWATER
PESTICIDE & PCB RESULTS
(ppb)

SAMPLE LOCATION	MW5	CULVERT
SAMPLE NUMBER	AQ 61851	AQ 61853
PESTICIDE & PCB's		
ALDRIN	0.05U	0.05U
DIELDRIN	0.10U	0.10U
CHLORDANE	0.50U	0.50U
4,4' - DDT	0.10U	0.10U
4,4' - DDE	0.10U	0.10U
4,4' - DDD	0.10U	0.10U
A - ENDOSULFAN	0.05U	0.05U
B - ENDOSULFAN	0.10U	0.10U
ENDOSULFAN SULFATE	0.10U	0.10U
ENDRIN	0.10U	0.10U
ENDRIN KETONE	0.10U	0.10U
HEPTACHLOR	0.05U	0.05U
HEPTACHLOR EPOXIDE	0.05U	0.05U
A - BHC	0.05U	0.05U
B - BHC	0.05U	0.05U
D - BHC	0.05U	0.05U
G - BHC (LINDANE)	0.05U	0.05U
METHOXYCHLOR	0.50U	0.50U
TOXAPHENE	1.0U	1.0U
PCB - 1242	0.50U	2.7
PCB - 1254	1.0U	1.0U
PCB - 1221	0.50U	510
PCB - 1232	0.50U	0.50U
PCB - 1248	0.50U	0.50U
PCB - 1260	1.0U	1.0U
PCB - 1016	0.50U	0.50U

KEY:

U - THE COMPOUND WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE DETECTION LIMIT FOR THE COMPOUND.

NDB - QUANTITATION IS NOT POSSIBLE DUE TO RELATIVE CONCENTRATION OF THE COMPOUND IN THE BLANK.

C - THE RESULT HAS BEEN CORRECTED FOR THE PRESENCE OF THE COMPOUND IN THE BLANK.

Air Route:

Volatile organic compounds were detected at greater than three times background at the underdrain location during health and safety monitoring conducted during sampling activities. A background reading on a Photovac TIP of 4 ppm was detected while at the culvert a reading of 15 ppm was obtained.

Conclusions:

1) From 1969 until 1975 several Bennington industries disposed of liquid wastes in an unlined lagoon at the Bennington Landfill. The waste stream contained substances which are toxic, persistent, carcinogenic or potentially carcinogenic, soluble, flammable and highly volatile.

2) Direct observation and laboratory analysis from site inspections provided evidence of contaminated soil, groundwater and air.

3) The site is situated on permeable gravels which are underlain by till and dolomite bedrock. Groundwater flow direction is thought to be to the southeast in the overburden. The areal and vertical extent of groundwater contamination is unknown.

4) Two public water supplies lie within a three mile radius of

the landfill. Seven private drinking water supplies lie within 0.5 mile from the landfill. Laboratory analysis of samples collected from some of these water supplies indicate that these supplies are presently unaffected by the landfill. A hydrogeologic investigation is necessary to properly evaluate the potential impact of the landfill on the above mentioned water supplies.

5) Soils and groundwater were found to be contaminated with hazardous substances which are attributable to the industrial waste lagoon.

Recommendations:

The AEC recommends that a remedial investigation/feasibility study should be conducted at the Bennington Landfill.

REFERENCES

1) USGS Topographic Map, Bennington 15' Quadrangle Bennington, Vermont N42525-W73075/7.5' Field Checked 1954.

2) Preliminary Assessment Report of Bennington Landfill, Bennington, Vermont. Vermont Agency of Environmental Conservation, January 1986.

3) Groundwater Favorability Map of the Battenkill and Walloomsac River Basins. Prepared by the Vermont Department of Water Resources.

4) Environmental Associates, Inc., 1974 Bennington Sanitary Landfill Preliminary Water Quality Analyses/Remedial Measures.

5) Environmental Associates, Inc., 1975 Final Report of the Bennington Landfill.

6) Environmental Associates, Inc., 1977 Vermont Sanitary Landfill Monitoring Program.

7) The Geology of the Bennington Area, Vermont, John A. MacFadyn, Jr., 1956 Bulletin No. 7. Vermont Geological survey.

8) The Surficial Geology and Pleistocene History of Vermont,

David P. Stewart and Paul MacClintock, 1969 Bulletin No. 31 Vermont Geological Society.

9) Internal memo dated April 7, 1976 to Martin Johnson from Tex LaRosa.

10) Internal memo dated August 5, 1986 to Bennington file from John Strunk.

11) Internal memo dated August 11, 1986 to Bennington Landfill file from Bill Barry.

12) Letter from Daniel Moon to Don Marsh dated April 2, 1976.

13) Solid Waste Files, Vermont Agency of Environmental Conservation, Waste Management Division, The Bennington Landfill.

14) Well Log Files, Groundwater Management Section, Department of Water Resources and Environmental Engineering, Vermont Agency of Environmental Conservation.

JS:cmc

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

I. IDENTIFICATION
01 STATE: VTD | 02 SITE NUMBER: 981064223

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER				
BENNINGTON LANDFILL	Houghton Lane				
03 CITY	**04 STATE**	**05 ZIP CODE**	**06 COUNTY**	**07 COUNTY CODE**	**08 CONG DIST**
Bennington	VT	05201	Bennington	063	01

09 COORDINATES: LATITUDE 42° 4' 4.0" | LONGITUDE 73° 12' 0.5"

10 TYPE OF OWNERSHIP (Check one): ☐ A. PRIVATE ☐ B. FEDERAL _____ ☐ C. STATE ☐ D. COUNTY ☒ E. MUNICIPAL ☐ F. OTHER _____ ☐ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION	02 SITE STATUS	03 YEARS OF OPERATION
8 / 20 / 86 (MONTH DAY YEAR)	☐ ACTIVE ☒ INACTIVE	1969 (BEGINNING YEAR) / 1986 (ENDING YEAR) ___ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply)
☐ A. EPA ☐ B. EPA CONTRACTOR _____ (Name of firm) ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR _____ (Name of firm)
☒ E. STATE ☐ F. STATE CONTRACTOR _____ (Name of firm) ☐ G. OTHER _____ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
John Strunk	Hydrogeologist	VT AEC	802)244-8702
09 OTHER INSPECTORS	**10 TITLE**	**11 ORGANIZATION**	**12 TELEPHONE NO.**
Tom Moye	Hazardous Waste Specialist	VT AEC	802)244-8702
Cammie McCormack	Hydrogeologist	VT AEC	802)244-8702
Bill Barry	Hazardous Waste Specialist	VT AEC	802)244-8702
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
Stu Hurd	Town Manager	205 South Street Bennington, VT	802)442-2626
John Brochur	Landfill Operator	205 South Street Bennington, VT	802)442-3140
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
☒ PERMISSION ☐ WARRANT	11:00 a.m.	Sunny 75° F

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
Tom Moye	Vermont Agency of Environmental Conservation	(802) 244-8702

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
John Strunk	VT AEC	Waste Management	(802)244-8702	2 / 19 / 87 (MONTH DAY YEAR)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
VTD	981064223

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- [X] A. SOLID
- [ ] B. POWDER, FINES
- [X] C. SLUDGE
- [ ] D. OTHER (Specify) _____
- [ ] E. SLURRY
- [X] F. LIQUID
- [ ] G. GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

- TONS: unknown
- CUBIC YARDS: unknown
- NO. OF DRUMS: unknown

03 WASTE CHARACTERISTICS (Check all that apply)

- [X] A. TOXIC
- [ ] B. CORROSIVE
- [ ] C. RADIOACTIVE
- [X] D. PERSISTENT
- [X] E. SOLUBLE
- [ ] F. INFECTIOUS
- [X] G. FLAMMABLE
- [ ] H. IGNITABLE
- [X] I. HIGHLY VOLATILE
- [ ] J. EXPLOSIVE
- [ ] K. REACTIVE
- [ ] L. INCOMPATIBLE
- [ ] M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	unknown		from inks and paints
OLW	OILY WASTE	unknown		from machine tool industry
SOL	SOLVENTS	unknown		from printing and machine shops
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS	unknown		from capacitor plant
IOC	INORGANIC CHEMICALS	unknown		from paint and inks
ACD	ACIDS	unknown		from auto battery plant
BAS	BASES	unknown		from printing industry
MES	HEAVY METALS	unknown		from inks and scrap batteries

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
OCC	PCB's	1336-36-3		510 ppb	
SOL	Toluene	108883		1010 ppb	
SOL	Benzene	71-43-2		45 ppb	
SOL	Ethylbenzene	100-41-4		82 ppb	
SOL	Total Xylenes	1330-20-7		249 ppb	

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

1. Preliminary assessment, VT Agency of Environmental Conservation

EPA FORM 2070-13(7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
VTD	981064223

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 [X] A. GROUNDWATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — [X] POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Groundwater contamination is possible since it is located in a near surface gravel deposit. Wastes were disposed of in an unlined lagoon.

01 [X] B. SURFACE WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: 8/20/84) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Surfaced waters leaching through the landfill were sampled and volatile organic compounds detected. This leachate flows to a marsh just East of the landfill and to Hewitt Brook ¼ mile from the site.

01 [X] C. CONTAMINATION OF AIR — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Numerous uncontrolled fires at the landfill have caused complaints to the State Air Pollution Control Division and the Town has been convicted of violating State Air Quality Regulations.

01 [X] D. FIRE/EXPLOSIVE CONDITIONS — 02 [X] OBSERVED (DATE: 6/85) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Liquid waste disposed of in the landfill is flammable. A state Air Pollution Staff person witnessed leachate catch fire during a site investigation in June 1985.

01 [X] E. DIRECT CONTACT — 02 ☐ OBSERVED (DATE: _____) — [X] POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

There is no security at the site. It is accessable to both humans and animals.

01 [X] F. CONTAMINATION OF SOIL — 02 ☐ OBSERVED (DATE: _____) — [X] POTENTIAL — ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: _____ (Acres) — 04 NARRATIVE DESCRIPTION

Wastes were poured directly into an unlined lagoon and dumped with other landfill material onto the ground. Leaching has transported them to the soil.

01 [X] G. DRINKING WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — [X] POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

The nearest drinking water well is 500 feet from the landfill. There are seven drinking water wells within a mile of the landfill.

01 ☐ H. WORKER EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

01 ☐ I. POPULATION EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
VTD	981064223

II. HAZARDOUS CONDITIONS AND INCIDENTS *(Continued)*

01 ☒ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) — XX POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Infra red aerial photo on July 1977 shows area of stressed vegetation to the East of the landfill.

01 XX K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION *(Include name(s) of species)*
The landfill is accessable to animals

01 ☐X L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) — ☐X POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION
PCB's disposed of in the lagoon and known to be bioaccumulative and could enter the food chain if they migrate from the landfill soils to Hewitt Brook.

01 XX M. UNSTABLE CONTAINMENT OF WASTES *(Spills/Runoff/Standing liquids, Leaking drums)* — 02 ☐ OBSERVED (DATE: _____) — XX POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION
Leachate is discharging from a drain pipe and from springs at the toe of the landfill and collected in marshy areas at the Eastern site boundary. Wastes were poured into a lagoon and in drums buried in the landfill.

01 ☒ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Hewitt Brook serves as a stream draining the area of the landfill and could be receiving contaminants from both surface and ground water. At least seven residences have wells that could become contaminated.

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS
A large quantity of tires were buried in the landfill next to the industrial waste lagoon. They burned in 1979 and when the Fire Department could not extinguish the fire they were buried in the landfill.

III. TOTAL POPULATION POTENTIALLY AFFECTED: _____

IV. COMMENTS

V. SOURCES OF INFORMATION *(Cite specific references, e. g., state files, sample analysis, reports)*
1) Preliminary Assessment, Vt. Agency of Environmental Conservation

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
VTD	981064223

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
☐ A. NPDES				
☐ B. UIC				
☒ C. AIR (State)				wood burning permit
☐ D. RCRA				
☐ E. RCRA INTERIM STATUS				
☐ F. SPCC PLAN				
☒ G. STATE (Specify)	0105A	9/15/83	9/15/88	does not include former
☐ H. LOCAL (Specify)				waste lagoon
☐ I. OTHER (Specify)				
☐ J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
☐ A. SURFACE IMPOUNDMENT		
☐ B. PILES		
☐ C. DRUMS, ABOVE GROUND		
☐ D. TANK, ABOVE GROUND		
☐ E. TANK, BELOW GROUND		
☒ F. LANDFILL		
☐ G. LANDFARM		
☐ H. OPEN DUMP		
☒ I. OTHER (Specify) buried lagoon		

04 TREATMENT (Check all that apply)
- ☐ A. INCENERATION
- ☐ B. UNDERGROUND INJECTION
- ☐ C. CHEMICAL/PHYSICAL
- ☐ D. BIOLOGICAL
- ☐ E. WASTE OIL PROCESSING
- ☐ F. SOLVENT RECOVERY
- ☐ G. OTHER RECYCLING/RECOVERY
- ☐ H. OTHER (Specify)

05 OTHER
- ☒ A. BUILDINGS ON SITE

06 AREA OF SITE
28 (Acres)

07 COMMENTS

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

☐ A. ADEQUATE, SECURE ☐ B. MODERATE ☒ C. INADEQUATE, POOR ☐ D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.

Waste lagoon is unlined and buried under landfilled material

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☐ YES ☒ NO

02 COMMENTS Lagoon is buried under 50 feet of refuse. However, leachate flowing out from underdrain is easily accessible.

VI. SOURCES OF INFORMATION (Cite specific references, e.g. state files, sample analysis, reports)

1) Solid Waste Section files - Vermont Agency of Environmental Conservation
2) Permits, Compliance and Protection files, Vermont Agency of Environmental Conservation

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
VTD	981064223

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)

	SURFACE	WELL
COMMUNITY	A. ☐	B. ☒
NON-COMMUNITY	C. ☐	D. ☒

02 STATUS

ENDANGERED	AFFECTED	MONITORED
A. ☒	B. ☐	C. ☐
D. ☒	E. ☐	F. ☐

03 DISTANCE TO SITE

A. 1.0 (mi)
B. 0.2 (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

☐ A. ONLY SOURCE FOR DRINKING ☒ B. DRINKING (Other sources available) COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available) ☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION (Limited other sources available) ☐ D. NOT USED, UNUSEABLE

02 POPULATION SERVED BY GROUND WATER 1780

03 DISTANCE TO NEAREST DRINKING WATER WELL 0.25 (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
8.0 (ft)	Southeast	8.0 (ft)	Unknown (gpd)	☐ YES ☐ NO

09 DESCRIPTION OF WELLS (Including useage, depth, and location relative to population and buildings)

Seven private drinking water wells in both bedrock and the unconsolidated material are located within 0.5 mile from the landfill. Six to the East/Southeast and one to the South of the landfill.

10 RECHARGE AREA		11 DISCHARGE AREA	
☐ YES ☐ NO	COMMENTS: Unknown	☒ YES ☐ NO	COMMENTS: Swamp with groundwater seeps occur <0.25 mile East of site

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

☐ A. RESERVOIR, RECREATION DRINKING WATER SOURCE ☐ B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES ☐ C. COMMERCIAL, INDUSTRIAL ☐ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
Hewitt Brook	☐	0.25 (mi)
	☐	(mi)
	☐	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. 235 NO. OF PERSONS	B. 1947 NO. OF PERSONS	C. 13108 NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION 0.06 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE 525

04 DISTANCE TO NEAREST OFF-SITE BUILDING 0.06 (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site, e.g., rural, village, densely populated urban area)

Rural residential community within 0.50 mile of Bennington Landfill

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
VTD	981064223

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

☐ A. $10^{-6} - 10^{-8}$ cm/sec ☐ B. $10^{-4} - 10^{-6}$ cm/sec ☐ C. $10^{-4} - 10^{-3}$ cm/sec ☒ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

☐ A. IMPERMEABLE (Less than 10^{-6} cm/sec) ☐ B. RELATIVELY IMPERMEABLE ($10^{-4} - 10^{-6}$ cm/sec) ☒ C. RELATIVELY PERMEABLE ($10^{-2} - 10^{-4}$ cm/sec) ☐ D. VERY PERMEABLE (Greater than 10^{-2} cm/sec)

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH
3-215 (ft)	on surface 0 (ft)	unknown

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
21 (in)	2.4 (in)	10.5 %	Southeast	6 %

09 FLOOD POTENTIAL

SITE IS IN _____ YEAR FLOODPLAIN

10 ☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE: A. _____ (mi)

OTHER: B. .11 (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

_____ (mi)

ENDANGERED SPECIES: _____

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS; NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS: PRIME AG LAND	AG LAND
A. 0.50 (mi)	B. 0.06 (mi)	C. _____ (mi)	D. 0.25 (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

The Bennington landfill is located on a Kame Terrace in the Eastern side of the Bennington Valley. Hewitt Brook originates in a swampy area located 0.25 mile east of the site.

VII. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

1) HRS USERS GUIDE (PERMEABILITY VALUES, RAINFALL DATA)
2) ENVIRONMENTAL ASSOCIATES, INC., 1975 FINAL REPORT OF THE BENNINGTON LANDFILL
3) WATER WELL LOGS, GROUNDWATER MANAGEMENT SECTION, VERMONT AGENCY OF ENVIRONMENTAL CONSERVATION
4) USGS TOPOGRAPHIC MAP, BENNINGTON 15' QUAD, Bennington, VT

N42525-W73075/7.5' FIELD CHECKED 1954

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 6 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
VTD	981064223

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER	20	Aquatac, Burlington, VT AEC Lab, Montpelier, VT	presently available
SURFACE WATER	6	AEC Lab, Montpelier, VT	presently available
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL	8	Aquatac, Burlington, VT AEC Lab, Montpelier, VT	presently available
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
Photoionization	Reading at culvert greater than 3.5 x background
	Reading health and safety air monitoring for volatile organics

IV. PHOTOGRAPHS AND MAPS

01 TYPE ☒ GROUND ☐ AERIAL

02 IN CUSTODY OF Vermont Agency of Environmental Conservation (Name of organization or individual)

03 MAPS ☒ YES ☐ NO

04 LOCATION OF MAPS Vermont Agency of Environmental Conservation

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

1) VT Agency of Environmental Conservation (AEC) Lab reports for Bennington Landfill

2) Aquatec Lab reports for Bennington Landfill

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
VTD	981064223

II. CURRENT OWNER(S)

01 NAME	02 D+B NUMBER
Town of Bennington	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
205 South Street	

05 CITY	06 STATE	07 ZIP CODE
Bennington	VT	05201

PARENT COMPANY (If applicable)

08 NAME	09 D+B NUMBER

10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

12 CITY	13 STATE	14 ZIP CODE

III. PREVIOUS OWNER(S) (List most recent first)

01 NAME	02 D+B NUMBER
Alden Harbour	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
120 Branch Street	

05 CITY	06 STATE	07 ZIP CODE
Bennington	VT	05201

IV. REALTY OWNER(S) (If applicable; list most recent first)

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

1) Solid Waste files, Solid Waste Section, Vermont Agency of Environmental Conservation

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
VTD	981064223

II. CURRENT OPERATOR *(Provide if different from owner)*

01 NAME	02 D+B NUMBER	04 SIC CODE
Town of Bennington		

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	05 CITY	06 STATE	07 ZIP CODE
205 South Street	Bennington	VT	05201

08 YEARS OF OPERATION	09 NAME OF OWNER

OPERATOR'S PARENT COMPANY *(If applicable)*

10 NAME	11 D+B NUMBER	13 SIC CODE

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	14 CITY	15 STATE	16 ZIP CODE

III. PREVIOUS OPERATOR(S) *(List most recent first; provide only if different from owner)*

01 NAME	02 D+B NUMBER	04 SIC CODE

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

PREVIOUS OPERATORS' PARENT COMPANIES *(If applicable)*

10 NAME	11 D+B NUMBER	13 SIC CODE

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	14 CITY	15 STATE	16 ZIP CODE

01 NAME	02 D+B NUMBER	04 SIC CODE

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

10 NAME	11 D+B NUMBER	13 SIC CODE

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	14 CITY	15 STATE	16 ZIP CODE

01 NAME	02 D+B NUMBER	04 SIC CODE

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

10 NAME	11 D+B NUMBER	13 SIC CODE

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	14 CITY	15 STATE	16 ZIP CODE

IV. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

1) Solid Waste files, Vermont Agency of Environmental Conservation

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
VTD	981064223

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION
01 STATE: VTD | 02 SITE NUMBER: 981064223

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ C. PERMANENT WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ D. SPILLED MATERIAL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ E. CONTAMINATED SOIL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ F. WASTE REPACKAGED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ G. WASTE DISPOSED ELSEWHERE — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☑ H. ON SITE BURIAL — 02 DATE _____ — 03 AGENCY Town of Bennington
04 DESCRIPTION Unlined industrial waste lagoon was unsuccessfully dewatered. Lagoon was filled and buried by landfill debris.

01 ☐ I. IN SITU CHEMICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ J. IN SITU BIOLOGICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ K. IN SITU PHYSICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ L. ENCAPSULATION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ M. EMERGENCY WASTE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ N. CUTOFF WALLS — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☒ O. EMERGENCY DIKING/SURFACE WATER DIVERSION — 02 DATE 1976 — 03 AGENCY Town of Bennington
04 DESCRIPTION Trenches were dug to the West of the landfill to divert surface water off site

01 ☐ P. CUTOFF TRENCHES/SUMP — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Q. SUBSURFACE CUTOFF WALL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
VTD	981064223

II PAST RESPONSE ACTIVITIES *(Continued)*

01 ☐ R. BARRIER WALLS CONSTRUCTED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ S. CAPPING/COVERING 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ T. BULK TANKAGE REPAIRED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ U. GROUT CURTAIN CONSTRUCTED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ V. BOTTOM SEALED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ W. GAS CONTROL 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ X. FIRE CONTROL 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ Y. LEACHATE TREATMENT 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ Z. AREA EVACUATED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ 1. ACCESS TO SITE RESTRICTED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ 2. POPULATION RELOCATED 04 DESCRIPTION	02 DATE _____	03 AGENCY _____
01 ☐ 3. OTHER REMEDIAL ACTIVITIES 04 DESCRIPTION	02 DATE _____	03 AGENCY _____

III. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

1) Solid Waste files, Solid Waste Section, Vermont Agency of Environmental Conservation

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
VTD	981064223

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☐ YES ☐ NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

III. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

ENVIRONMENTAL PROTECTION AGENCY REGION 1

SITE INSPECTION DECISION RECORD FY 87

46 pgs.

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
VT	D981064223

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Bennington Landfill	Houghton Lane
03 CITY	**04 STATE** / **05 ZIP CODE**
Bennington	VT / 05201

FINAL SI: completed by ☐ FIT (FI-.....-...)
☑ State
☐ EPA
☐ _____

REVIEWED ☑ Site Name
☑ Site ID No.
☑ Existing File
BY _____

SUMMARY OF COMMENTS

a. STATE comments, dated ....., by .....

Summary _____

b. SITE OWNER comments, dated ....., by .....

Summary _____

c. EPA REGION 1 comments, dated 4/17/87., by R. Leabman

Summary Any further site work will depend on HRS result

d. ..... comments, dated ....., by .....

Summary _____

FINAL SI DECISION BY EPA SI COORDINATOR:

a. ☑ Agree with report
b. ☐ Disagree with Report _____

c. Further Actions Develop HRS package

d. Final decision made by Donald R. Smith Date 4-24-87

CERCLIS INFORMATION:

a. Site Discovery Date ✓ (If not already in CERCLIS)
b. PA Start Date ✓ ; Compl. Date ✓
c. SI Start Date 08-20-86 ; Compl. Date 03-30-87 & FY 87 Quarter 1 (2) 3 4
d. Entry Date _____ ; Entered By _____